Comparison of therapeutic response of keloids and hypertrophic scars to cryotherapy plus intralesional steroid and bleomycin tattoo.

Background and Objectives: *Keloid and hypertrophic scars are abnormal responses of body to skin injuries. Over production of compacted fibrous tissue is the basic cause of these lesions. In this study the result of treatment of these skin conditions with bleomycin tattoo are compared with cryotherapy and triamecinolone injection*

Methods and Materials*: This clinical trial study was done on 40 patients with hypertrophic scar or keloid.Patients were divided in 2 groups randomly. Group A (20 patients) was treated with bleomycin tattoo and group B (20 patients) with cryotherapy and triamecinolone injection.In group A, lesions punctured after local anesthesia with lidocaine and bleomicin dropped on lesions. In group B lesions freezed 30 seconds and then triamcinilone injected intralesional. There were 3 therapeutic sessions one month apart. All patients were followed up for 3 month after the end of treatment. The therapeutic response was determined as flattening relative to initial size.*

Patients were assessed for complications of both treatments.

Results: *Out of 20 group A patients: Complete flattening (100% regression) in 11 cases (55%); significant flattening (75-99% regression) in 5 cases (25%); and adequate flattening (50-74% regression) in 4(20%) was seen. In group B, complete flattening in 6 cases (30%); significant flattening in 12 cases (60%) and adequate flattening in 2 cases (10%) was seen. Although the difference in complete flattening is seen in 2 grops but it wasn't meaningful statistically. Hyper pigmentation was the most common complication in group A as atrophy and hypopigmentation were in group B cases.*

Conclusion: *Bleomycin administration is simple, effective and cheaper than surgery and lasertherapy. The main complication is permanent pigmentation of treated sites and it's common. Thus it's appears that bleomycin administration can be used a reasonable treatment modality.*

Key words: *Bleomycin, cryotherapy, intralesional steroid, keloid, hypertrophic scars*